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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,837

02/17/2006

Emile Johannes Karel Verstegen

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

BERMAN, SUSAN W

ART UNIT

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1796

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,837	Applicant(s) VERSTEGEN ET AL.	
	Examiner /Susan W. Berman/	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9-112007</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Applicant's election of Group I, claims 1-11 in the reply filed on 02-19-2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 12-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 02-19-2008.

It is agreed that the requirement for election of species is moot because Group I Invention has been elected.

Drawings

Figures 1a - 1c, 2, 3 and 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite for the following reasons. It is not clear what is meant by “non-leaching”. The claim fails to use proper Markush language, for example, “selected from the group consisting of acrylate monomer, methacrylate monomers, allylic monomers, norbornene monomers and mixtures of said monomers”. It is not clear whether the hybrid monomers are intended to be included in the Markush group or to be separate additional components of the composition. It is not clear what chemical different polymerizable groups are suitable or present in the “hybrid” monomers. The kinds of polymerizable groups present in the hybrid monomers should be clearly recited in the claim. It is not clear whether the thiol monomers are intended to be included in the Markush group or to be separate additional components of the composition since the claim also sets forth that the thiol monomer is used in combination with a non-thiol monomer. If the adhesive system requires a non-thiol monomer and thiol monomer, this should be clearly set forth in the claim.

With respect to claim 2, it is not clear whether the monomer is required to contain two polymerizable groups that are the same, two polymerizable groups that are chemically different from each other, or one functional group and one polymerizable group or two functional groups that are also polymerizable (same or different?).

Claim 3 fails to use proper Markush language, i.e. “selected from the group consisting of diallylic ester of isophorone diisocyanate, triallyl cyanurate, triallyl isocyanurate, di-allyl ether of trimethylolpropane and triallyl ether of trimethylolpropane”.

Claim 4 fails to use proper Markush language, as discussed above. Additionally it is not clear what the scope of “ethoxylated homologs of these compounds” is. The claim should clearly what “homologs” are included, such as ethoxylated trimethylolpropane dithiol or ethoxylated pentaerythritol pentathiol or ethoxylated dimethylolpropane dithiol, or ethoxylated trimethylolpropane trithiol, for instance.

Claim 5 recites a specific acrylate monomer but does not require that the claim 1 “at least one monomer” is the recited acrylate, or even is an acrylate monomer.

Claim 6 is indefinite because it does not clearly set forth whether it intends to claim a “photoinitiator” or a “UV initiator”, which is a species of photoinitiator. The claims is rendered further indefinite by the use of the abbreviation “UV” instead of “ultraviolet”.

Claim 8, the phrase “preferably...diluent” renders the claim indefinite because it is not clear whether applicant intends to claim the generic (meth)acrylate diluent or the preferred (meth)acrylate diluent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The instant claims recite a composition comprising at least one monomer selected from the groups set forth in claim 1 and a polymerization initiator. The properties “non-leaching”, “curable” and “adhesive” are considered to be inherent properties of prior art compositions comprising the same components as are instantly claimed. With respect to claims 3-5, the claims, as written, recite species of monomers but do not require that the recited species be present in the composition recited in claim 1. The claim language merely states some species of allyl, thiol or (meth)acrylate monomers in the case that such monomers are selected. Claim 3 does not recite “wherein the at least one monomer is an allylic monomer selected from the group consisting of...”. Claim 4 does not recite “wherein the at least one monomer is a thiol monomer selected from the group consisting of...”. Claim 5 does not recite “wherein the at least one monomer is ...”.

Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kitsunai et al (6,627,287, filed 04-25-2001). Kitsunai et al disclose an adhesive composition having strong

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adhesion for bonding an optical disc comprising a silane coupling agent, a UV curable compound and a photopolymerization initiator. Photopolymerizable monomers taught include monofunctional and polyfunctional (meth)acrylates (column 3). Initiators are taught in column 4, lines 3-31. Example 2 discloses a composition comprising a bisphenol A type epoxy acrylate, 2-hydroxy-2-phenoxypropyl acrylate in combination with a phosphine oxide photoinitiator and an methacryloxy-functional silane. Kitsunai et al teach the monomer recited in instant claim 5. Kitsunai et al do not teach the monomers recited in claims 3 or 4; however, these claims are included in the rejection in view of the claim interpretation discussed above.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ha et al (6,180,200). Ha et al disclose radiation curable pressure sensitive adhesive compositions for bonding digital discs. Ha et al teach monomers such as acrylates and thiols, photoinitiators and adhesion promoters such as methacrylylalkyltrialkoxysilanes. See column 3, line 51, to column 4, line 17, column 9, lines 30-67, column 10, lines 11-58, column 11, lines 7-19, column 11, lines 51-54, and column 14, lines 26-34. Ha et al do not teach the monomers recited in claims 3, 4 or 5; however, these claims are included in the rejection in view of the claim interpretation discussed above.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Tokuda et al (6,017,603). Tokuda et al disclose a UV curable adhesive composition for bonding DVDs. The composition comprises (A) a bisphenol A epoxy acrylate, (B) a urethane (meth)acrylate, (C) a (meth)acrylate monomer other than (A) or (B) and a photoinitiator. See column 3, lines 11-23,

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column 5, line 51, to column 6, line 6, column 6, lines 55-57, column 7, lines 16-38 and the Examples. Tokuda et al teach compositions comprising the epoxy (meth)acrylate recited in instant claim 5.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Iida (6,171,675). Iida discloses UV curable adhesive composition for preparing optical discs comprising acrylate-functional compounds, a thiol compound and a photoinitiator. Thiol compounds corresponding to those recited in instant claim 4, such as trimethylolpropane trithiopropionate or pentaerythritol tetrakis(3-mercaptopropionate), are taught in column 2, lines 49-67. Polyfunctional acrylates are taught in column 3, lines 57-67.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (5,366,812). Takahashi et al disclose compositions comprising a thermoplastic saturated norbornene polymer. Crosslinkers such as triallyl isocyanurate can be added to increase strength (column 10, lines 30-41). Addition of a surface active agent is taught in column 8, line 64. The compositions are suitable for optical materials (column 12, lines 40-45). The compositions disclosed by Takahashi et al comprise a norbornene-functional material and a crosslinker, such as triallyl isocyanurate, and an initiator for thermal- or photo- polymerization. Therefore, in the absence of evidence to the contrary, the disclosed curable compositions would be expected to provide a non-leaching, adhesive system, as set forth in the instant claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kerfeld (6,190,838). Kerfeld discloses a process for making multiple data storage disk stampers from one master. A recorded master is used to make a first generation stamper using a photopolymerization process is taught in column 2, line 45, to column 3, line 15. A bonding layer is discussed in column 11, lines 28-49. A photopolymerization process is taught in column 13, lines 8-45, and photopolymer compositions including acrylate monomers and photoinitiators are taught in column 14, lines 4-17.

Ha et al (6,472,451) disclose radiation curable adhesives for digital versatile discs comprising acrylate-functional compounds and thiol compounds.

Inagaki et al (4,906,675) disclose adhesive compositions for bonding optical discs comprising (meth)acrylates of formula (I) wherein X is an alkylene group in which at least one hydrogen can be replaced with hydroxyl. See column 16 and Example 13.

Murakami (6,444,285) discloses UV curing compositions for bonding two discs to provide optical disks. Compositions comprising bisphenol A epoxyacrylate are taught in the Examples.

Uchida et al (5,218,067) disclose allyl ester oligomer compositions for preparing optical materials for optical discs. See the Abstract, column 1, lines 8-14, and column 5, lines 16-24.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Susan W. Berman/ whose telephone number is 571 272 1067.

The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB
5/14/2008

/Susan W Berman/
Primary Examiner
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